**IN THE SPECIFICATION**

**Please replace the paragraph beginning on page 10, lines 17-25 with the amended paragraph as follows:**

FIG. 6 shows one embodiment of a frequency domain control information transmission system 600 that can insert signals into the frequency minima locations shown in the graph 700 shown in FIG. 7. The frequency domain control information transmission system 600 comprises a transmitter portion 601 and a receiver portion 603. The transmitter portion 601 comprises a band pass filter 602, a combiner 604, a modulator 605, a subcarrier generator 607, a control-in 611, and a transmitter 606. The receiver portion 603 comprises a receiver 608, a splitter 610, a band stop filter 612, a band pass filter 614, a [[control-in 611]]control-out 610, a subcarrier generator 617, and a demodulator 616.

**Please replace the paragraph beginning on page 13, lines 10-26 with the amended paragraph as follows:**

The information generator 903 applies control information to the modulator 910. The subcarrier generator 901 apples a subcarrier to the modulator 910. In modulator 910, the subcarrier is modulated by the control information. The modulated control information output of modulator 910 is coupled to the spreading mixer 908. The code generator 905 applies a prescribed spreading code to the spreading mixer 908. The modulated control information is frequency spread based upon the spreading code. Pseudocode generators are sometimes used to generate these spreading codes. The spreading mixer 908 increases the frequency bandwidth at which the modulated control signal exists; however, the amplitude of the control information at any one of the individual frequencies is diminished. The spreading mixer converts the control information 1008 into the spread control information 1010 as shown in FIG. 10. The output of the spreading mixer 908 is sent to a combiner 906 which combines the spread modulated information with the data to form a composite signal 1012. The output of the combiner 906 is then sent to the transmitter 912. The transmitter 912

transmits a signal over the GbE data link 106 that is received by the receiver 914 of the receiver portion 904.

**Please replace the paragraph beginning on page 13, line 27 through page 14, line 9 with the amended paragraph as follows:**

The output of the receiver 914 is coupled to the splitter 916. The splitter transmits part of the signal received from receiver [[916]]914 as data to be further processed. The control information contained in the output data signal may be treated as noise, and removed accordingly. The splitter 916 is preferably a 3 dB splitter. The splitter 916 also outputs the signal containing the combined control information and data into the despreader 918 (often called a signal correlator). The code generator 915 also inputs a spreading code typically generated by a pseudorandom code generator (corresponding to the spreading code produced by code generator 905 that also has a pseudorandom code generator) into the despreader 918. Based upon the spreading code, the input into the despreader obtains an unspread signal corresponding to the control information with the data portion of the signal removed. The output of the despreader 918 as well as the subcarrier are both input into the demodulator 920. The subcarrier generator 917 inputs a subcarrier signal into the demodulator 920. The demodulator 920 demodulates the control information using the subcarrier.